HKSH Ophthalmology Centre

Happy Valley
Hong Kong Sanatorium & Hospital
4/F, Li Shu Fan Block
2 Village Road, Happy Valley, Hong Kong
Tel: (852) 2835 8880; (852) 2835 8890
Fax: (852) 2892 7510
eye@hksh-hospital.com
www.hksh-hospital.com
Service Hours
Monday to Friday: 9:00 am – 5:00 pm
Saturday: 9:00 am – 1:00 pm
Closed on Sundays and Public Holidays
Consultation by Appointment

Admiralty
HKSH Healthcare Medical Centre
Level 21, One Pacific Place
88 Queensway, Hong Kong
Tel: (852) 2855 6700
Fax: (852) 2523 7660
eye@hksh-healthcare.com
www.hksh-healthcare.com
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For enquiries and appointments,
please contact us

OPH.133I.H/E-04-112024

Contact Lenses

養和眼科部
HKSH Department of Ophthalmology

www.hksh.com

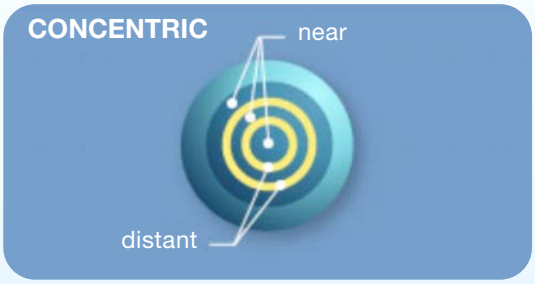
Contact Lenses

Contact lenses are small, curved lenses that sit directly on the eye, correcting refractive error without the need for glasses. They are a popular vision correction option for people with nearsightedness, farsightedness, astigmatism, and presbyopia. Contact lenses offer a variety of benefits, including improved peripheral vision, a wider field of view, and the ability to participate in sports and activities without the limitations of glasses. However, it is important to understand that contact lenses require proper care and hygiene to ensure safety and comfort.

Functions of Contact Lenses

1. Correct Refractive Errors: Myopia, Hyperopia, Astigmatism, and Presbyopia

Contact lenses are commonly used to correct refractive errors like nearsightedness (myopia) and farsightedness (hyperopia). Today's technology offers specialised lenses, including toric lenses for astigmatism and multifocal lenses for presbyopia, expanding the range of vision correction options. Multifocal contact lenses, designed to address presbyopia (age-related difficulty focusing on near objects), come in various designs. The most common design features a concentric bifocal pattern, with the near prescription in the centre and the distance prescription at the periphery. While these lenses provide acceptable vision for most daily activities, you may still need glasses for specific tasks like night driving or reading fine print.



2. Keratoconus Lenses: Smoothing the Cornea for Clearer Vision

Keratoconus is a progressive, debilitating eye disease characterised by degenerative thinning and protrusion of the central cornea, leading to distorted vision. Symptoms include photophobia, visual distortion, halos around lights, ghosting and glare, decreased vision, and monocular diplopia (double vision). While spectacles and soft contact lenses cannot correct vision caused by keratoconus, most individuals can achieve functional vision with therapeutic rigid gas permeable (RGP) contact lenses. These specialised lenses, sometimes worn over a soft lens, improve vision by creating a smooth, regular optical surface over the distorted, cone-shaped cornea.

3. Orthokeratology (Ortho-K, OK Lenses): Reshaping Your Cornea for Clear Daytime Vision

Orthokeratology (Ortho-K) lenses are specially designed RGP contact lenses that temporarily correct low degrees of nearsightedness. Worn overnight while sleeping, these lenses gently reshape the cornea, improving vision during the day without the need for glasses or daytime contact lenses. However, the cornea gradually returns to its original shape after discontinuing the wearing of Ortho-K lenses for a few days, leading to the recurrence of refractive errors. While Ortho-K offers a convenient vision correction option, it is important to be aware of potential risks associated with overnight wear:

- **Corneal complications:** Trapped foreign bodies, rubbing the eyes, and overnight wear can increase the risk of corneal epithelial abrasion, dislocation, oedema, and even ulceration
- **Allergic reactions:** Sensitivity to contact lens solutions is possible
- **Eye infections:** Overnight wear can increase the risk of eye infections

4. Prosthetic Contact Lenses: Enhancing Cosmetic Appearance in Scarred Corneas and Eye Diseases

These special prosthetic contact lenses are made to assist patients who have experienced serious eye injuries or diseases that have altered the appearance of their eyes. These lenses can cover up any scarring or disfigurement on the cornea, helping to improve the appearance of the eyes. Prosthetic contact lenses can also help people with aniridia or albinism by reducing their sensitivity to light.

Without prosthetic contact lens

With prosthetic contact lens

5. Therapeutic Bandage Lenses: Supporting Corneal Healing and Recovery

Therapeutic bandage lenses are a type of extended wear contact lens used as bandages for various eye conditions that cause pain. They are used to treat conditions such as corneal abrasions after injury, recurrent erosion, bullous keratopathy, or post-corneal surgeries like phototherapeutic keratectomy. These lenses promote corneal healing, serve as a protective barrier, and reduce discomfort caused by friction from blinking during the recovery phase. Bandage lenses are primarily made of silicone hydrogel, a material with high oxygen permeability that facilitates corneal healing. Unlike other protective options, such as pressure patching, bandage contact lenses allow for easy medication administration to the eyes.

Types of Contact Lenses

Soft Lenses

Soft contact lenses are made of soft, flexible plastics which are easier to adapt to and are more comfortable than rigid gas permeable lenses. Some soft lenses are made of silicone hydrogel, allowing more oxygen to pass through to the cornea.

There are three types of soft contact lenses:

- **Disposable lenses:** They are replaced daily, biweekly, monthly or quarterly and are removed prior to sleeping. The cost of these lenses are higher, but the chance of developing an eye infection or contact lens complication is less. However, if the lenses are over-worn or not properly cleaned and disinfected, some risks are still present
- **Conventional lenses:** They are designed for long-term use, typically lasting for about a year before replacement. These lenses require removal prior to sleeping and regular cleaning and disinfection
- **Extended-wear lenses:** They are designed for overnight wearing, typically for six consecutive nights or more. Length of continuous wear depends on the lens type and your eye care professional's evaluation on your tolerance for overnight wearing

Rigid Gas Permeable (RGP) Lenses

RGP lenses are made of rigid gas permeable materials allowing good oxygen permeability to the eyes. They are easier to handle, more durable and more resistant to deposit build-up. They generally give clearer vision, especially for patients with high astigmatism and are more suitable for patients with dry and sensitive eyes. However, RGPs are initially less comfortable than soft contact lenses, and it might take a few weeks to adjust to wearing them. In contrast, soft contact lenses only take a few days to get used to.

Complications

Wearing contact lenses comes with some risks. If your eyes are very dry, the corneal surface can get damaged, leading to potential issues like corneal abrasion, infection, or ulcer. Prolonged wear could also impact your vision and cause issues like corneal oedema or neovascularisation due to the lack of oxygen. Vision may be impaired in these situations.

Another common complication, more often associated with soft contact lenses, is giant papillary conjunctivitis. It is an allergic reaction to lens protein deposits, contact lens material, or solution. It will cause redness, itchiness, increased mucus secretion, blurry vision and contact lens intolerance.

Care Tips

- **Consult your eye care professional:** Due to individual needs and eye conditions, it is essential to consult your ophthalmologist or optometrist before using contact lenses
- **Wash your hands:** Always wash your hands thoroughly with soap and water before handling your contact lenses
- **Use recommended solutions:** Use the cleaning and disinfecting solutions recommended by your eye care professional, especially for handling coloured prosthetic lenses, so as not to affect the coloured layer and the prosthetic outcome
- **Follow wear schedules:** Never sleep with your lenses on unless they are specifically designed for overnight use. Replace your lenses as per the designated schedule by your eye care professional
- **Keep your eyes hydrated:** Use lubricating eye drops if your eyes feel dry
- **Attend regular eye check-ups:** Schedule regular eye check-ups to ensure your eye health